

## MITIGATION VALUE AND TREATMENT OF CREDITS

The Petersen Ranch Mitigation Bank ("Bank") provides a unique, large-scale opportunity for mitigation and land conservation. The 4,000+acre Bank would be the second largest mitigation bank in the United States; the largest is an approximately 19,100-acre mitigation bank known as Pineywoods Mitigation Bank in Texas. Due to the large-scale conservation and contiguous preserved habitat provided by the Pineywoods Mitigation Bank, it was designated one of the largest service areas in the nation, and its service area crosses over the state line. The Bank offers a similar landscape-scale conservation effort that is incomparable to the smaller mitigation banks conserving small isolated habitats that are prevalent in Southern California.

As noted above, the Bank would be the largest mitigation bank in California. Based on compiled RIBITS data for public commercial, private commercial, and combination public/private mitigation banks within the Los Angeles U.S. Army Corps of Engineers (Corps) District, the typical, commercial mitigation bank in the Los Angeles District contains an average 409 acres of land with a median of 190 acres (Corps 2015). Therefore, the Bank is approximately 10 times larger than the average mitigation bank and 37 times larger than the median commercial mitigation bank in the Corps' Los Angeles District. Additionally, to better understand the value of the size of the Bank as compared to the surrounding privately-owned lands, parcel sizes were mapped within the Bank's Service Area (Figure 1). This parcelization mapping exercise indicated that the Bank contains contiguous, privately owned habitat with acreage not commonly found within the service area. The majority of the privately-owned parcels within the service area were less than 40 acres in size. The Bank is comprised of over 100 separate parcels that were assembled by the former owner over three decades. Therefore, the Bank provides a rare opportunity for a large-scale mitigation bank and it is unlikely that any other property within the service area will provide acreage-size or mitigation opportunities comparable to the Bank. Conservation and restoration of this large-acre property by converting it into a mitigation bank provides large-scale conservation that is not offered by other mitigation banks in Southern California. Additionally it is unlikely that another opportunity for this scale of conservation would be available in the surrounding privately-owned lands.

In addition to its size, the Bank provides contiguous wetland and ephemeral stream habitats that are considered to be a part of the headwaters of the Santa Clara River. As described in a recent publication by the Environmental Protection Agency (EPA 2015), preserving the connectivity of wetlands and ephemeral drainages in the headwaters of streams is crucial to the health of downstream ecosystems. The Bank is also located within the San Andreas Rift Zone Significant Ecological Area (LA County, 2012) and is surrounded by significant protected areas including the Angeles National Forest. The Bank will provide connectivity between portions of the Angeles National Forest as well as preserve land located within the San Andreas Rift Zone Significant Ecological Area. It supports many wildlife corridors, including the San Andreas Rift Zone, Portal Ridge-Mojave Desert corridor, and a linkage from the Tehachapi Range through the Mojave Desert and into the Castaic Range. The Portal Ridge-Mojave Desert wildlife corridor is particularly important since it is an overland crossing of the aqueduct that connects wildlife to preserved land including the Antelope Valley California Poppy Reserve, Angeles National Forest, and other lands in the Antelope-Fremont Valley. This is a valuable wildlife corridor to maintain since wildlife crossings in Los Angeles County connecting to the Mojave Desert are restricted due to the barrier created by the California Aqueduct. Due to its size and location, the Petersen Ranch Mitigation Bank provides unique, large-scale opportunities for conserving and enhancing many valuable ecological resources including contiguous wildlife corridors, headwaters of the Santa Clara River as well as the Amargosa Creek, and significant ecological areas.

The Bank is located in Northern Los Angeles County which is expected to be subject to rapid growth from the nearby cities of Palmdale and Lancaster, as well as renewable energy projects including wind and solar energy farms, which limits future conservation efforts in the area. Using the scenario and assumptions given in the Desert Renewable Energy Conservation Plan (DRECP) acreage calculator, the area expects to see a minimum of 314,606 acres of land conversion within the DRECP boundary for renewable energy projects in order to achieve an 80 percent reduction in greenhouse gas emissions by 2050 (DRECP 2012). By converting the Petersen Ranch to a mitigation bank, it eliminates the possibility that the Petersen Ranch - which contains high-value ecological resources and the entirety of their contributing watersheds - would become developed. Further, the development in the area is expected to increase by 121 percent between 2005 and 2020 resulting in increased development in currently natural areas (RWMG 2007). This expected increase in the residential population could result in indirect effects to the surrounding lands such as decreased habitat for endangered plants and animals, decreased jurisdictional wetland and water features, and fragmented habitats. In the area immediately surrounding the Bank, conversion of grazing lands to residential developments and renewable energy projects pose the highest threat to natural habitats. Given the quality and variety, location and scope of, the Bank will provide high quality wetland mitigation in a rapidly urbanizing portion of Los Angeles County where few existing mitigation options exist.

Further, creation of the Bank would contribute to preserving the functionality of the San Andreas Fault Significant Ecological Area, preserving irreplaceable wildlife corridors, increasing the connectivity and health of surrounding conserved lands such as the Angeles National Forest, and contributing to the health of downstream water sources such as the Santa Clara River. These types of high-value ecological services could not be conserved by smaller mitigation banks, or permittee responsible mitigation types. A precedent should be set that would encourage similar large-scale conservation in the form of multi-thousand acre mitigation banks. Therefore, due to the high quality and large-scale conservation merited by the Bank within a Significant Ecological Area, containing both critical wildlife corridors and the headwaters of the Santa Clara River, greater incentives for these large-scale conservation values should be applied in the determination of service areas, crediting and mitigation ratios. As such, the mitigation ratios described in the following section should be applied in order to incentivize the creation of large-scale mitigation banks, including the Petersen Ranch Bank Property, and set the precedent for conservation of similar ecologically valuable, landscape-scale mitigation banks.

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## References

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